DOCUMENT RESUME

ED 227 941 PS 013 418

AUTHOR Smith, Robert F.
TITLE Gifted Early Childhood Education: An Overview.
PUB DATE [82]
NOTE 21p.
PUB TYPE Viewpoints (120) -- Guides - Non-Classroom Use (055)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Early Childhood Education; *Gifted; *Identification; Measures (Individuals); *Preschool Children; *Student Characteristics; *Talent; Teacher Role

ABSTRACT

Gifted preschool children have the right to an education designed to maximize their potential, and it is the responsibility of the early childhood educator to develop the competencies needed to provide a child with such an education. However, in order to provide appropriate educational experiences for the gifted and talented child, the educator should (1) possess a basic conception of what "gifted" and/or "talented" means, (2) be knowledgeable about the characteristics of the gifted child, (3) become familiar with various methods of identifying the gifted child (such as standardized tests, checklists, and parental reports), and (4) be aware of existing educational programs for the gifted. (MP)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED227941

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

X This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

Gifted Early Childhood Education: An Overview

Robert F. Smith

During her mother's interview with her prospective teacher, three and a half year old Joannie Collins became utterly engrossed in a book she had taken from the classroom library. She seemed to be actually reading the text rather than just looking at the pictures. Mrs. Brent, the teacher, noticed Joannie's behavior and commented on it to her mother.

"Oh, Joannie can read simple books, Mrs. Brent," proudly exclaimed Mrs. Collins. "She's loved books since she was a baby. My husband and I read to her a lot. When she was almost two and a half, she was already able to read certain words at sight."

Mrs. Brent was intrigued by Joannie's ability to read at such an early age. She had read about such precociousness but never had a child with Joannie's ability in her class before. Joannie was apparently "gifted" and Mrs. Brent wasn't quite sure if she was prepared to teach Joannie effectively. Much of her teacher preparation and her actual teaching experience revolved about the so-called "normal" preschooler.

Giftedness: An Overview

Population

The gifted child such as Joannie Collins described above represents another type of exceptionality in addition to the handicapped child. Because gifted children of every age, ethnic, and economic group comprise approximately two to five percent of the school population (Cartwright, Cartwright, and Ward, 1981), it is highly probable that most early childhood teachers,

PS013418

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY
Robert F. Smith
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

at one time or another, will have a gifted youngster in their classrooms. Like Mrs. Brent, however, they may not be prepared to offer such children educational experiences appropriate for enhancing their development.

Historical Background

In 1969, a Congressional mandate directed the U. S. Commissioner of Education, Sidney P. Marland, to conduct a study of available educational opportunities for gifted and talented children throughout the nation. On October 6, 1971, Marland submitted to Congress his report which has been considered a catalyst for recent developments in the education of the gifted (Marland, 1972). The study revealed that a majority of gifted children across the country were not receiving appropriate special educational services, especially minority and culturally different gifted children. The myth that such children could succeed on their own was refuted by research which demonstrated that, in fact, these children did require specialized programs for the full development of their potential.

As a result of Marland's report to Congress, the U. S. Office of Gifted and Talented was established to advocate a national effort on behalf of gifted and talented children. At first, no federal funds were available, but through sustained lobbying, monies eventually were provided for federal support of gifted programs (P.L. 93-380, 1976; P.L. 95-561, 1978). Unfortunately, the appropriation of federal monies for serving the needs of the gifted was shortlived. In 1981, the U.S. Office of Gifted and Talented was disbanded; the Gifted and Talented Children's Education Act of 1973 was also repealed.

Even though the major intent of P.L. 94-142 (1975) is directed toward children with handicapping conditions, it has served to heighten everyone's consciousness about the need and the right of every child to a free and appropriate public education; every child, including the gifted, stands to profit from the law's implementation. Cartwright, Cartwright, and Ward (1981) point out that about nine states are currently providing services to gifted children under P.L. 94-142 and indicate that this number may grow. Nevertheless, with or without federal funds, states and local organizations must continue to recognize the needs of the gifted and find ways to provide them with enriched educational experiences.

Definition

In order to provide appropriate educational experiences for gifted and talented children, it is necessary to identify who these children are. Before identification is possible, however, one must have a basic conception of what "gifted" and/or "talented" means.

Numerous definitions of giftedness have appeared over the years and have varied tremendously according to the values of a given society. In general, giftedness has been equated with intellectual superiority, usually defined as a high score on a test of general intelligence. Criteria for high performance, however, have varied. The American Personnel and Guidance Association recommended in the late 1960s that:

> The academically talented student is one who receives a score of about 115 or over on a Stanford-Binet intelligence test or falls above a similar point on one of the Weschler Intelligence Scales (Reynolds & Birch, 1977, p. 217).

From their extensive review of the literature, Roedell, Jackson, and Robinson (1980) found that "most studies specify a mimimum I.Q. of 120 to 140, but in many instances the threshold of giftedness has been defined as high as 160 or even 180" (p. 2). Today, most school districts usually set the lower limit somewhere between 120 and 135 in identifying gifted students on the basis of I.Q. scores (Cartwright, Cartwright, and Ward, 1981).

Identifying gifted and talented children, however, on the basis of I.Q. scores alone is limited. I.Q. tests are considered accurate predictors of later academic achievement; nevertheless they only measure "general" intelligence. J.P. Guilford (1950, 1967), in his "Structure of the Intellect" expanded the concept of intelligence to include a variety of cognitive abilities and traits not previously identified. For example, divergent thinking skills emerged as significant factors of the structure of intelligence. These skills, important for creative thinking and problem-solving, include sensitivity to problems, fluency, flexibility, novel ideas, the ability to synthesize, analyze, and redefine, and evaluation. Whereas Guilford expanded the concept of intelligence to include creative thinking abilities, Getzels and Jackson (1962) and Torrance (1962) identified creativity as an important component of giftedness. From their studies of creative children Getzels and Jackson (1962) found differences in abilities, personality, attitudes, and other traits between the highly creative child and the child considered high-achieving on the basis of intelligence test scores alone.

Creativity, then, became a factor in the identification of the gifted. Also, because of an increasing emphasis on the culturally

different gifted child, educators began to include other talents beyond those which were reflected only on intelligence test scores or academic achievement tests.

A broadened definition of the gifted child appeared in Commissioner Marland's report to the Congress on the status of the gifted child (Marland, 1972). This definition, because it includes a wide range of abilities and talents, enables gifted children to be identified not only by measures of intellectual ability and scholastic aptitude but also by criteria for creativity, leadership, talent in the visual and performing arts, and psychomotor ability. The definition reads as follows:

> Gifted and talented children are those identified by professionally qualified persons (and) who by virtue of outstanding abilities are capable of high performance. These are children who require differentiated educational programs and services beyond those normally provided by the regular school program in order to realize their contribution to self and society.
>
> Children capable of high performance include those with demonstrated achievement and/or potential ability in any of the following areas: (a) general intellectual ability, (b) specific academic aptitude, (c) creative or productive thinking, (d) leadership ability, (e) visual and performing arts, (f) psychomotor ability.
>
> (Marland, 1972, p. 2)

Such a definition, formally accepted by the U.S. Office of Education as its official guidelines for the identification of gifted and talented children, has been adopted by many states and has made it possible for a greater number of such children to receive the growth opportunities they rightly deserve.

Characteristics of the Gifted Child

It is especially important to avoid stereotypes when talking about the characteristics of gifted children. A wide range of traits and behaviors can be found among these children as among the general population. For example, in summarizing their research on intellectual abilities of the gifted, Roedell, Jackson & Robinson (1980) state that:

> Some intellectually advanced children acquire proficiency in basic academic skills at an early age; others do not. Some children with advanced intellectual ability show superior skill in most or even all cognitive domains; others show advanced skills only in particular areas, such as verbal reasoning, memory, or spatial reasoning ability.
>
> (p. 26)

Overall Adjustment

The myth that many gifted children are anti-social, timid, and overly dependent upon their parents is unfounded. The majority of research studies, in fact, appear to indicate that such children generally are healthy, popular, and emotionally well-adjusted. Despite the wide variations that exist among gifted children in terms of family, personal, social, and intellectual characteristics some general statements can be made about their overall adjustment (Roedell, Jackson, and Robinson, 1980). Several research studies have found that children with moderately advanced intellectual abilities are generally well-adjusted in that they appear to be socially adept, emotionally secure, and to function well both in school and later life. On the other hand, children with extremely advanced intellectual skills seem to experience some difficulty in adjusting socially with their peers. This may be partly due to the gaps that exist among their levels of intellectual, social, emotional and physical development. For example, some preschoolers

may be reading at a fourth grade level but still have difficulty manipulating a crayon. Extremely bright preschoolers may conceptualize projects, for example, setting up an electric circuit, but at the same time lack the physical skills needed to carry out the project. This discrepancy in ability can lead to frustration. An intellectually bright three-or four-year-old may still need help toileting and dressing, exhibit aggressive behavior toward other children, lack the skill to participate in cooperative play or group activities, be unable to share and take turns, and so on (Roedell and Robinson, 1977). Adults need to understand that this unevenness in developmental levels is difficult and frustrating for young gifted children; support, encouragement, and direct guidance are needed to help these children make appropriate adjustments in their behavior.

Temperament - the way in which the individual behaves - can be an important factor in the bright child's overall adjustment to his/her environment. An extremely intelligent child may, because of temperament, approach novel activities or situations hesitantly or may even appear reticent to tackle something new. Another bright child may shy away from engaging in interpersonal situations. Consequently, because of negative temperament styles, a child's advanced intellectual abilities may be underestimated and/or overlooked by the classroom teacher. This can affect the child's behavior in that the teacher's lack of recognition can lead to a child's loss of self-confidence. Also, boredom and concomitant negative behavior can result from the teacher's failure to recognize the child's intellectual abilities and adapt instruction accordingly.

The Gifted Preschooler

What do we know about the specific behaviors and abilities of gifted preschoolers? Because of the larger number of young children participating in Head Start, day care, preschools, and so on, it is somewhat easier now than years ago to attribute certain characteristics to the gifted youngster in the early childhood years. Yet, caution must be again exercised because of the apparent heterogenity within this particular population.

Kitano (1982, p. 16), from her review of the literature on the young gifted child, summarized the characteristics of the young gifted child as follows:

Figure 1.

Behaviors and traits of the young gifted child

INTELLECTUAL AND ACADEMIC
is attentive; alert
possesses advanced vocabulary for age
shows early interest in books and reading
learns rapidly
has high level of curiosity
enjoys being with older children
pursues interests; collects things
has long attention span
possesses high standards
shows mature sense of humor for age
prefers new and challenging experiences
retains information
displays high level of planning, problem-solving, and abstract thinking compared to peers

CREATIVE
asks many questions
does things in own way (independent)
may prefer to work alone
experiments with whatever is at hand
is highly imaginative
thinks up many ways to accomplish a goal
may respond with unexpected, smart-aleck answers
produces original ideas

LEADERSHIP
is frequently sought out by peers
interacts easily with other children and adults
adapts easily to new situations
can influence others to work toward goals -- desirable or undesirable
is looked to by others for ideas and decisions
is chosen first by peers

MUSIC
makes up original tunes
shows degree of tonal memory
enjoys musical activities
responds sensitively to music
easily repeats rhythm patterns
easily discriminates tones, melodies, rhythm patterns

ART
fills extra time by drawing, painting, etc.
draws a variety of things -- not just people, horses, flowers
remembers things in detail
takes art activities seriously and derives satisfaction from them
has long attention span for art activities
shows planning in composing the artwork

Roeper (1977) provides interesting insights into the behaviors of the young gifted preschooler which she acquired from working with such children for many years. For Roeper, the most important difference between the gifted child and a more average child is the lack of balance between intellectual and emotional development for the gifted child. For example, the gifted child can be age seven intellectually but only age three emotionally. Consequently, such a child can have great difficulty dealing emotionally with what he/she understands intellectually. Parents and educators must understand this difference and the enormous problems it can create for the young gifted child. Acceptance, support, and nurturance will help the child overcome the problems created by this gap between intellectual and emotional developmental levels.

Another difference between the gifted and average child has to do with what Roeper refers to as a loss of innocence.

> The young child is usually protected by the fact that he/she is egocentric and is somewhat unaware of what goes on in the outside world. The gifted child loses this protection sooner as he/she eats from the Tree of Knowledge at an early age. In Jean Piaget's terms, the gifted child becomes an abstract thinker before the child is emotionally ready to deal with this understanding. Magical thinking is lost and the child is confronted with the cold facts of the environment and what he/she sees may be frightening. This is why we cannot say that the gifted child is privileged over others for knowledge is not in itself a privilege or even an advantage. In some ways, the preschool gifted child requires more help and support than other children.
>
> (Roeper, 1977, p. 391)

The young gifted child may be more dependent upon adults for communication because his/her verbal ability and skill in communicating

ideas surpasses that of his peers or classmates who are not as advanced in these same areas. Thus, while opportunities for interacting verbally with peers should always be encouraged, the gifted child should also have similar opportunities to communicate with adults - especially parents and teachers.

Specific characteristics of gifted preschoolers call for a special kind of guidance and support from the adult. For example, the need for perfection brings about a certain anxiousness and possibly inhibition. Because of the desire to live up to high expectations, the gifted child may shy away from trying something new. Adult encouragement is needed to help overcome these inhibitions. Also, some gifted preschoolers may manifest an inordinate fear of death. This results from their heightened sensitivity to adult feelings and their mature insight into the realities of life. These same children may exhibit anger toward war and other injustices. Much assurance is needed by these children as they grapple with their emotional responses; they need to feel protected but also that they are being told the truth.

Culturally Different and/or Handicapped Gifted Children

Any discussion of the characteristics of the gifted child must take into account that gifted minority or handicapped children may exhibit specific characteristics different from those of the general gifted group. Thus, such children could be easily overlooked in the usual identification strategies for gifted programs and their potential for optimum development untapped. For example, Bernal (1978) identified the following behaviors in gifted Chicano children:

-rapidly acquires English skills, given exposure
-exhibits leadership ability, sometimes in an unobtrusive manner
-enjoys intelligent risk taking
-keeps busy and entertained, especially by imaginative games designed from simple toys
-accepts responsibility reserved for older children, such as supervising younger children or helping with homework
-is street wise

(Quoted in Kitano, 1982, pp. 16-17)

Torrance (1971, p. 75) summarized the following characteristics of culturally different children who are gifted:

1. High nonverbal fluency and originality.
2. High creative productivity in small groups.
3. Adeptness in visual art activities.
4. High creativity in movement, dance, and other physical activities.
5. High motivation from games, music, sports, humor, and concrete objects.
6. Language rich in imagery.

Another minority group of gifted children who might be overlooked is the handicapped. A physical handicap or learning disability might overshadow intellectual abilities and particular talents these children might possess. It is incumbent upon teachers to be alert to behaviors -- perceptual, intellectual, social, or psychomotor -- which might indicate giftedness or advanced ability among this population.

Identification of the Gifted and Talented Child

Some children stand out immediately as academically gifted, for example, Joannie Collins who could read at three and a half years of age. Other children have obvious talents -- artistic,

musical, or physical. Still others express their giftedness through language - verbal or written. Consider the following piece of creative writing done by a five year old:

> Jousting Tournaments
>
> When a jousting tournament begins, a herald goes from castle to castle announcing the tournament. Squires start cleaning and polishing their master's armor. Tailors make surcoats and gay gowns for the ladies. Knights practice with their swords and lances, and pages pretend with wooden swords. In a few days, the tournament will be held! People start coming to the castle that is holding the tournament. Rooms are found for spectators to sleep in. If they don't find rooms, they set up tents. Today's the day! The tournament is being held today! The knights are up at dawn. Squires help put on armor. The herald goes around collecting knights from their tents. Pretty soon they form a parade. The knights charge in the lists. A lance hits a shield - bang! A knight is thrown off a horse. It happens again and again. Ladies throw scarves and ribbons to their favorite knights. The knight who has broken the most lances receives a garland of flowers on his head by the Queen of Love and Beauty.
>
> The End
>
> (Cartwright, Cartwright and Ward, 1981, p. 295)

Not all gifted children are easily identified, however, particularly during the preschool years. Certain artistic talents or academic abilities in math or science may not yet have manifested themselves. Creative talent may still lie dormant because of insufficient motivation or lack of opportunity for expression. Some gifted children may not be identified as such because of

withdrawn or aggressive behavior due to the discrepancy that exists between their ability and social-emotional development. Thus, knowledge of, and the ability to apply screening procedures for identifying gifted children are essential.

Standardized Testing

Usually a two-stage process of identification is followed (Kitano, 1982; Martinson, 1975). Group measures are used on all children to identify the top 10 to 15 percent in performance. Such measures include group intelligence tests, teacher checklists, pupil products, and parent information. Stage two screening then focuses on individual testing of the target population. At this stage, individual intelligence tests, creativity tests, and/or other measures are used for identifying specific talents and abilities. Roedell, Jackson, and Robinson (1980) discuss the pros and cons of standardized testing, with specific focus on the use and interpretation of tests of general intellectual ability, specific intellectual and academic ability, and tests measuring productive thinking abilities. Karnes and Taylor (1978) list standardized tests for measuring preschool children in the following areas: intelligence, achievement/readiness, creativity, social development, and perceptual-motor skills. They also suggest activities for assessing artistic and musical talent in preschool children.

Informal Checklists

Widespread testing for identifying gifted and talented youngsters may not always be possible due to a lack of funds and inexperienced personnel. Thus, teachers can use their own informal checklists for identifying potentially gifted children. Such checklists contain characteristics generally associated with gifted and talented children

(Martinson, 1975; Kitano, 1982). When using such checklists, however, the teacher must be aware that not all gifted children display every or even many of the characteristics described in the literature.

Other Means of Assessment

Parent responses to questionnaires, and/or interviews can be useful in identifying potentially gifted children. Brumbaugh and Roschs (1959) present checklist items which parents of preschool children can respond to in terms of the intellectual, academic, and leadership characteristics their children may manifest. Even though parents tend to overestimate their children's abilities, they still can help in the identification process (Ciha, Harris, Hoffman, and Potter, 1974).

In short, no one single measure is valid for identifying those children who are potentially gifted or talented. A variety of assessment procedures -- from standardized testing to classroom observation of concrete behaviors -- need to complement one another in the identification process. In this way more potentially gifted children might be identified and offered the educational opportunities they need for optimum development.

Educational Programming for the Gifted

Programs for gifted and talented children have usually included: 1) self-contained classrooms or instructional programs for the gifted; 2) pull-out resource room programs which provide enrichment activities outside the confines of the self-contained classroom and which are usually conducted by specialists in a variety of fields; 3) acceleration through grade-skipping and 4) enrichment via ability grouping within a self-contained heterogeneous classroom. Self-contained or homogeneous classrooms for gifted young children may be effective. Nevertheless, there is as yet no conclusive evidence that such specialization in early childhood is necessary or even desirable (Safford, 1978). Also, the continuing decreasing federal and state funds for education programs in general, and for the gifted in particular, make such specialization fiscally impossible. The best alternative, and least expensive, might be to "mainstream" the gifted young child into the regular early childhood classroom or program. The benefits of mainstreaming special students seem to be of value to gifted children as well as to handicapped children. Reynolds and Birch (1977) note that:

> Enrolling gifted and talented pupils in regular classes, while bringing excellent individualized special education to them there, has been emerging as the preferred practice, so far as grand strategy is concerned. Thus, organization for instruction is planned, preferably in the context of full mainstreaming or partial mainstreaming.
>
> (p. 242)

Sound education pedagogy thus mandates that the early childhood educator be extremely skilled in providing individualized activities

for each child in his/her classroom, activities which are geared to each child's needs and ability levels and which provide opportunities for the optimum development of each child's potential.

Teachers of gifted preschoolers have at their disposal a wealth of suggestions for providing sound and challenging learning activities for children not only intellectually gifted but also for children identified as highly creative and/or talented in the visual and performing arts. (Roedell, Jackson & Robinson, 1980; Safford, 1978; Kitano, 1982; Gallagher, 1975; Karnes and Associates, 1978).

The gifted preschool child has the right to an education designed to maximize his/her potential to the fullest extent possible. The early childhood educator has the responsibility to develop the competences needed to provide a child with such an education. Practitioners in the field of early childhood education for the gifted have made it possible for contemporary early childhood educators to fulfill their responsibility in providing rich educational experiences for the gifted preschooler.

References:

Bernal, E. "The Education of the Culturally Different Gifted." In A. H. Passow (ed.), The Gifted and the Talented: Their Education and Development. 78th Yearbook of the National Society for the Study of Education. Part I. Chicago: University of Chicago Press, 1979.

Brumbaugh, F. N., and Roschs, B. Your Gifted Child: A Guide for Parents. New York: Holt, Rinehart & Winston, 1959.

Cartwright, G. Phillip, Cartwright, Carol A., and Ward, Marjorie E. Educating Special Learners. California: Wadsworth, 1981.

Ciha, T. E.; Harris, R.; Hoffman, C.; and Potter, M.W. "Parents as Identifiers of Giftedness, Ignored But Accurate." Gifted Child Quarterly 18, No. 3 (1974): 191-195.

Gallagher, James. Teaching the Gifted Child. Boston: Allyn & Bacon, 1975.

Getzels, J., and Jackson, P. Creativity and Intelligence. New York: John Wiley, 1962.

Guilford, J. "Creativity." American Psychologist, 1950, 5, 444-454.

Guilford, J. Nature of Human Intelligence. New York: McGraw Hill, 1967.

Karnes, Merle B.; Kemp, Polly; Kilbourn, Barbara; and Strong, Paula Sabatino. Nurturing Academic Talent in Early Childhood: Reading. Urbana, Illinois: Publications Office, Institute for Child Behavior and Development, University of Illinois, 1978.

Karnes, Merle B. and Strong, Paula Sabatino. Nurturing Creative Talent in Early Childhood. Urbana, Illinois: Publications Office, Institute for Child Behavior and Development, University of Illinois, 1978.

Karnes, Merle B. and Strong, Paula Sabatino. Nurturing Leadership Talent in Early Childhood. Urbana, Illinois: Publications Office, Institute for Child Behavior and Development, University of Illinois, 1978.

Karnes, Merle B.; Strong, Paula Sabatino; Anderson, Suzanne; and Kemp, Polly. Nurturing Psychomotor Talent in Early Childhood. Urbana, Illinois: Publications Office, Institute for Child Behavior and Development, University of Illinois, 1978.

Karnes, Merle B.; Strong, Paula Sabatino; Anderson, Suzanne; and Kemp, Polly. Nurturing Talent in The Visual and Performing Arts in Early Childhood. Urbana, Illinois: Publications Office, Institute for Child Behavior and Development, University of Illinois, 1978.

Karnes, Merle B; Strong, Paula Sabatino; and Kemp, Polly. Nurturing Intellectual Talent in Early Childhood. Urbana, Illinois, Publications Office, Institute for Child Behavior and Development, University of Illinois, 1978.

Karnes, Merle B. and Taylor, Angela R. Preschool Talent Assessment Guide. Urbana, Illinois: Publications Office, Institute for Child Behavior and Development, University of Illinois, 1978.

Kitano, Margie. "Young Gifted Children: Strategies for Preschool Teachers." Young Children, May 1982, Vol. 37, No. 4, pp.14-24.

Marland, Sidney, P., Jr. Education of the Gifted and Talented, vol. 1. Report to the Congress of the United States by the U.S. Commissioner of Education. Washington, D. C.: United States Government Printing Office, 1972.

Martinson, Ruth A. The Identification of the Gifted and Talented. Reston, Virginia: Council for Exceptional Children, 1975.

Reynolds, M. C., and Birch, J. Teaching Exceptional Children in All America's Schools. Reston, Virginia: Council for Exceptional Children, 1977.

Roedell, Wendy Conklin; Jackson, Nancy Ewald and Robinson, Halbert B. Gifted Young Children. New York: Teachers College, Columbia University, 1980.

Roedell, W. C. and Robinson, H. B. Programming for Intellectually Advanced Children: A program development guide. Seattle: University of Washington, Child Development Research Group, 1977 (ERIC ED 151094).

Roeper, Annemarie. "The Young Gifted Child." The Gifted Child Quarterly. Fall 1977, Vol. xxi, No. 3, pp. 388-396.

Safford, Philip L. Teaching Young Children with Special Needs. St. Louis, Missouri: Mosby, 1978.

Torrance, E. Guiding Creative Talent. Englewood Cliffs, New Jersey: Prentice-Hall, 1962.

Torrance, E. "Psychology of Gifted Children and Youth." In W. Cruickshank (ed.), Psychology of Exceptional Children and Youth, 3rd ed. Englewood Cliffs, New Jersey: Prentice-Hall, 1971.